



Water Quality NewsFlash

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Climate Change – Implications for stormwater control – A recent conference addressed the impact of global warming on California. The climate models predict temperature increases throughout California but the increases will be much greater inland and especially at higher elevations. Precipitation generally decreases except for the a slight increase in northern CA. Snowpack may be reduced as much as 60%. Increased coastal winds may result in more ocean upwelling (and potentially greater marine productivity). Days with the temperature above 95°F will double in LA and quadruple in SF.

Implications for stormwater? Decreased water availability may put pressure on stormwater agencies to conserve runoff through infiltration rather than discharging it. Aquatic biota will be stressed as waterways increase in temperature making pollutant control even more critical. The increase in prolonged hot events (i.e., extreme temperature events for 7-days or more) may make it more difficult to establish vegetation on construction sites. On the plus side (from the standpoint of stormwater control), most of California will have 2 to 3 fewer heavy rainfall events per year (the North Coast and North Lahontan basins will have more events). Conference http://www.energy.ca.gov/global_climate_change/2004_conference/presentations/index.html Research paper: http://www.es.ucsc.edu/~jbell/Belletal2004_JCL.pdf,

Shoreline Pollution – Study finds link to contaminated groundwater –

Unexplained pollution events at Huntington Beach have perplexed researchers. Sewage treatment effluent discharged offshore and nearby dry weather and wet weather discharges from storm drains have been identified as potential sources (see *NewsFlash* 04-14). A new report from Stanford concludes that at least some of the bacterial contamination results from contaminated groundwater moving into the surf zone from the shoreline aquifer. The shoreline source was verified through the use of radium isotopes. Samples of near-shore groundwater showed high levels of bacteria as well as nitrates, which are a sign of sewage contamination. In general, bacteria are thought to be filtered out when water moves through soil. However, the highly porous sandy shoreline soils may have less filtering capacity. Some studies have shown that viruses, which are significantly smaller than bacteria, move more readily through soils than bacteria. http://www.stanford.edu/dept/news/report_stage/news/2004/may26/beaches-526.html

Shoreline Pollution – Study finds link to natural sources – Campbell Cove in Bodega Bay received an “F” grade from Heal the Bay and is ranked as the second most polluted beach in the state based on dry weather bacteria monitoring. Unlike at other beaches, however, broken sewer lines or runoff do not seem to be the cause. A recent \$500,000 study has concluded that the sources are birds and sea mammals. In addition, some bacteria may be regrowing in the sand. Article. http://www.pressdemocrat.com/local/news/01cove_b1.html

WQ NewsFlash is a weekly update of storm water and related news for the Department. *Verify information before taking action on these bulletins.* Contact Betty Sanchez, Betty_Sanchez@dot.ca.gov (916) 653-2115, or Fred Krieger, (510) 843-7889, fkrieger@msn.com with questions or to be added or deleted from e-mail list. Posted online at: <http://www.dot.ca.gov/hq/env/stormwater/publicat/newsflash/index.htm>